LETTERS

Concerning constitutionality of law governing clinical laboratories.*

STATE OF CALIFORNIA
Legal Department: U. S. Webb, Attorney-General

San Francisco,
November 19, 1935.

Department of Public Health,
State of California,
State Building,
San Francisco, California.

Gentlemen:—Under date of August 16, 1935, there were presented to this office certain proposed regulations of the State Board of Health concerning clinical laboratories. The regulations purport to be those prepared pursuant to Chapter 638 of the Statutes of 1935, such chapter being entitled:

"An act relating to the conduct of clinical laboratory technologists and clinical laboratory technicians and the issuance of permits to physicians and surgeons conducting clinical laboratories for the purpose of protecting the public health and to provide penalties for the violation of the provisions of this act."

Since that time very careful consideration has been given to the proposed regulations as well as to the Act itself. Certain opinions concerning the Act have heretofore been rendered to you. These opinions dealt with specific questions, but did not touch the constitutionality of the Act.

The consideration given the proposed regulations has disclosed a situation, however, which causes us to conclude that the entire Act is unconstitutional and hence without force or effect.

Section 1 of the Act provides in effect that it shall be unlawful for any person in a clinical laboratory to make any test or examination requiring the application of one or more of the fundamental sciences therein named "unless said person possesses an unrevoked certificate issued one year from and after the date this Act becomes effective." This refers to technicians. The same section makes it unlawful for any person to make any test or examination requiring the application of one or more of such fundamental sciences unless such person "possesses an unrevoked certificate as a clinical laboratory technologist issued ninety days from and after the date this Act becomes effective."

Section 4 of the Act makes it the duty of the State Board of Public Health to issue a certificate of licensure within ninety days "to each person who shall within sixty days after this Act become effective, show proof of having complied with the qualifications of a clinical laboratory technologist as herein defined."

The same section also provides that it shall be unlawful for any person to act as a clinical laboratory technologist without certification as such from and after ninety days of the going into effect of this Act. It is also provided that it shall be unlawful for any laboratory or technologist or physician and surgeon conducting, maintaining or operating a laboratory to employ any technician except such technician be certified as provided in Section 1 of the Act.

You will note that the law does not provide for the issuance by the Board of a certificate of licensure to anyone who does not within sixty days from the effective date thereof show proof of having complied with the qualifications of a technologist.

You will also note that it is the duty of the Board to issue certificates of licensure to technicians found to be properly qualified; but you will likewise note that, according to Section 1, a technician must possess a certificate issued one year from and after the effective date of the Act and a technologist must possess a license issued ninety days from and after the effective date of the Act.

According to the established rules of statutory interpretation, the language "from and after," as used in Section 1, must be interpreted to mean within one year from and after in the first instance and within ninety days in the second instance. This must logically be so because according to Section 4 it is unlawful for a person to act as a technologist without having been certified within ninety days from and after the effective date of this Act.

It is likewise unlawful for any laboratory or person to employ a technician after one year from the date of enactment of the Act into law unless he be licensed. It must hence follow that only those persons can under this law be licensed who come within the purview of Section 3 of the Act as to technologists, and Sections 1 and 4 of the Act as to technicians. Consequently, all technologists must be issued a certificate of licensure within ninety days of the effective date of the Act and all technicians must be issued certificates of licensure within one year from and after the effective date of the Act.

We are forced to the conclusion that unless a person within these respective time limits qualifies for a license he can never receive one and that persons may not hereafter qualify as technologists or technicians because of the limiting language of the Act. This results in a discrimination without a reasonable basis for classification.

Aarve v. *Crosby*, 48 Cal. App. 424.

There must be a reasonable and just relation to the things in respect to which a classification is imposed.

Barbier v. *Connelly*, 113 U. S. 27.

The statute would, therefore, appear to be unreasonable and arbitrary for the reason that it does not accord equal protection of the laws to all persons possessing the same qualifications as to education. The time when a person possesses certain qualifications is not a recognized method of regulating a business or profession. I am inclined to the view that the Supreme Court would hold that the legislature could not "under the guise of protecting the public, arbitrarily interfere with private business or prohibit lawful occupations or impose unreasonable and unnecessary restrictions upon them."

Liggett Co. v. *Baldridge*, 278 U. S. 105.

It is held in the case of *Louisiana State Board of Medical Examiners* v. *Fyfe*, 111 So. 58, that the State may regulate *within reasonable bounds* the practice of medicine and surgery. It is doubtful if it would be reasonable to permit licensure to those with certain qualifications on a given date and at the same time prohibit licensure to persons having superior qualifications at a subsequent date.

Very truly yours,

U. S. WEBB, *Attorney-General.*
By LIONEL BROWNE, *Deputy.*

* See also editorial comment, page 3.

Concerning baking soda-sodium fluoride poisonings in San Francisco.*

December 13, 1935.

To the Editor:—You have, no doubt, read of the recent deaths in San Francisco of some persons from accidental poisoning by sodium fluoride.

These cases are more remarkable in that there is so little in our medical literature relating to their occurrence. Herzog Medical Jurisprudence mentions cases in not recent accidental and suicidal poisonings in New York and Chicago. We have, in my experience in the San Francisco coroner's office, had two deaths, suicidal, one by ant paste, a white person; another by ant powder, a Chinese.

This is one of a variety of cases in the experience of a coroner's office where deaths happen from some cause where the occurrence, if anticipated, might have been prevented by necessary laws.

A somewhat similar case occurred in San Francisco some years ago, where a concern manufacturing oxygen and hydrogen gas put out, accidentally, a highly explosive mixture of oxygen and hydrogen, which, being used for welding purposes, caused an explosion. The coroner's office immediately examined samples of gas under the same serial number, and finding it to be explosive, by telegram and otherwise, called in all tanks of that serial number, but not before another explosion occurred at a distant point. At the inquest following, the company concerned, through its chemists, was about to prove the explosion to have been an "act of God" when two laborers in the works, suddenly called in by the coroner, testified

* See also news item printed in December CALIFORNIA AND WESTERN MEDICINE, page 455.

that in their work of cleaning the batteries they had accidentally disconnected some of the wires and had evidently misplaced them, disarranging the poles. The accident was evidently due to the fact that a young man had been elevated to the position of superintendent of the concern who had not the education in chemistry necessary to direct such important work.

We have also had a variety of cases of food poisoning, for example, the *Promethius* disaster where, at the launching of said vessel, a San Francisco caterer supplied a cold luncheon and the potato salad was contaminated, some deaths ensuing, and scores of people made ill. A variety of ptomain poisoning was demonstrated.

We have also had cases where numerous people were infected with trichinosis from eating sausage made of meats not properly inspected.

These events in the life of a coroner crop up at unexpected intervals. All accidents might have been prevented if the cause had been anticipated and necessary legislation enacted. It seems too bad that most of our safety laws, laws for the conservation of human life, must be based upon and follow the death of martyrs to the cause.

In these cases concerned the accident was caused, evidently, by lack of necessary legislation or regulations regarding the distribution or sale of commercial poisons to salvage companies. A barrel of sodium fluoride, part of a large consignment of sodium fluoride shipped through a steamship company to a firm in San Francisco, was damaged in transit and evidently sold to a local salvage company, where it remained on the floor for a considerable length of time.

The purchaser for a large advertising grocery concern, on visiting the salvage company's place of business, saw an unopened barrel of Arm and Hammer brand soda. Inquiring of the salvage people if they had more on hand, and being answered in the affirmative, he told them to send out to his concern all they had. Part of the materials on hand were damaged cases of Arm and Hammer brand in their labeled cartons. These were opened and dumped into barrels. The warehouse man making up the consignment searched through the building for other barrels of soda, and inadvertently included in his collection this damaged barrel of sodium fluoride, which, with some five other open barrels of supposed soda, he delivered to the grocery concern. The contents of only one barrel was tested by this man, this by taste and feel.

These were received by an employee of the grocery store without check or examination and placed on sale, part of which was made into one-pound paper packages marked, in lead pencil, "baking soda." The rest, in open barrels, was scooped out to the individual purchaser in two, three, or five-pound lots, as purchaser desired.

As the barrels became partly depleted, they were, for sales purposes, kept refilled from other barrels. Packages of sodium fluoride without soda were sold as baking soda. Other packages contained mixed soda and fluoride.

Arsenic was found by the chemist of the Department of Public Health in a preliminary test of packages as the major poison, the coroner's chemist finding fluoride as the major poison, also arsenic present in small but variable nontoxic quantities. The presence of sodium fluoride and arsenic at first led to the possibility of insecticide being the source of the trouble. From an authoritative source it was reported that arsenic is present as an impurity in commercial sodium fluoride. Inspectors George Engler and Allan McGinn of the San Francisco Police Department, who were detailed on the case, taking this as a cue began a search for commercial sodium fluoride, which they eventually found and traced from its source to the warehouse, grocery store, and consumer. The finding of our city chemist of the variable presence of arsenic in nontoxic quantities in samples examined was not completely in accord with the theory of arsenic as an impurity of commercial sodium fluoride. A check by the chemist of the U. S. Food and Drug Administration at San Francisco, Mr. Alfred K. Klein, found that the reaction for arsenic was due to the action of hydrofluoric acid upon arsenic contaminated glass bottles used in the test for sodium fluoride. This finding was communicated to the director of our local Board of Health and to the coroner.

Mr. G. J. Morton, chief of the U. S. Food and Drug Administration at San Francisco, has been most accommodating in extending the services of his corps of chemists and well-equipped laboratory, and is conducting further research into the possible presence of arsenic in commercial sodium fluoride.

From a recent book on toxicology the dose to cause toxic symptoms was determined to be 5 grams (77 grains), roughly, one and one-sixth teaspoonfuls; the lethal dose, 10 grams (154 grains) roughly, two and one-half teaspoonfuls. The large lethal dose possibly prevented other deaths.

Three deaths were caused, evidently by the poisonous sodium fluoride, although in two cases the hearts were diseased and the poisons may have been only contributory, and a few people were made ill. The wide publicity immediately given through press and radio saved other lives. About 375 packages are still unaccounted for.

Sodium fluoride melts at 982 degrees centigrade or 1799 degrees Fahrenheit. Acid vapors are evolved at 128 degrees centigrade or 262 degrees Fahrenheit, a possible menace to firemen when quantities are stored in a burning warehouse.

The menace of aged canned and other food materials offered at sales to unsuspecting purchasers was brought out.

The jury's verdict and recommendation follows:

We, the jury, find that Mary Catherine Ogle, Bessie M. Shufelt, and Albert F. Perry came to their deaths after using baking soda with a mixture of sodium fluoride purchased from Rosenthal's Department Store.

We, the jury, charge both Manno Salvage Company and Rosenthal's Department Store with criminal negligence in the careless handling of the above mixture which resulted in the foregoing deaths.

We, the jury, recommend that the Director of Public Health make a survey of the situation resulting in these deaths and draw up necessary legislation or regulations to prevent a recurrence of this tragedy; and further recommend to the Board of Supervisors that this legislation recommended by the Director of Public Health be passed and appropriate funds be furnished for carrying out this legislation.

Already the necessary steps have been taken to pass legislation governing the control of the purchase and sale of industrial poisons and foodstuffs by salvage companies, this by national, state, and local agencies.

Trusting that this will afford you material for necessary comment which may lead to the further safeguarding of lives of our citizens in the line of food and drug consumption, I remain

Very sincerely,

THOMAS W. B. LELAND, M. D.,
Coroner, City and County of San Francisco.

Concerning the practice of obstetrics.

STATE OF CALIFORNIA
Legal Department

San Francisco,
November 19, 1935.

Dr. C. B. Pinkham,
Secretary-Treasurer,
Board of Medical Examiners,
State Building Annex,
San Francisco, California.

Dear Sir:—In your communication of October 28, 1935, you enclosed a copy of a birth certificate filed with the registrar at Ontario, California, under date of October 17, 1935. You ask whether a chiropractor has the right to do obstetrics and point out that the child in this instance was attended by such a licentiate.

In reply permit me to state that a chiropractor has no right to hold himself out as being entitled to do obstetrics. This office has on many occasions expressed its view that a chiropractic license, which is, according to Section 7 of the Act, a license to practice chiropractic, authorizes the holder thereof to practice chiropractic and that obstetrics is not included in the field of chiropractic.

I may call to your attention, however, the provisions of Section 22 of the Medical Practice Act, which provides that "nothing in this act shall be construed to prohibit service in the case of emergency." Your letter does not indicate whether the chiropractor in question was render-